

To: Federal Communications Commission
Subject: ET Docket No. 03-137; FCC 03-132
From: MQZUIVOTQN
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The FCC's use of "categorical exclusion" of "antenna farms" has resulted in the broadcasters on Lookout Mountain in Golden, Colorado avoiding environmental processing by claiming that they are "categorically excluded" from this requirement. This means that a large residential population dwelling on land zoned as residential for 50 years is excluded from any protections afforded under the FCC compliance with the federal laws on the environment. This exclusion results in widespread exposure of hundreds of children living on Lookout Mountain at the same elevation as the broadcast antennas to levels of broadcast radiation that may be damaging to their health.

Dr. Don Maish, in a paper dated March 26, 2003, stated "On March 3rd, 2003, the US Environmental Protection Agency (EPA) proposed new guidelines for evaluating cancer risks to children, on the grounds that children may be 10 times more vulnerable than adults to cancer risks from exposure to a wide range of chemicals." He continues, "The EPA views the question of chemical exposure as so significant that it has written a separate guidance paper on risks of cancer to children, concerned that exposure to mutagenic chemicals may be significantly more dangerous to the young. At first this may seem irrelevant to children's use of cell phones until it is realized that there is also a large body of scientific evidence, some of which is examined in this paper, that indicates children may be far more vulnerable to health effects from exposure to mobile phone microwave radiation than adults, as well."

The Electro-Magnetic Radiation (EMR) guidelines are based on the effects of EMR on an adult human body. Children are at higher risk from the higher frequency signals than adults because the lower wavelength is closer to their height. Dr. Neil Cherry stated, "The most efficient energy absorption occurs when the wavelength of the Electro-magnetic wave is close to twice the size of the object." Dr. Cherry states, "Hence an incident RF signal at 300 MHz and power density of 20uW/cm² would produce a SAR (specific absorption rate) for the adult of 0.0009 W/KG and the child .00179 W/KG, two times higher for the child than the adult. This ratio remains the same for all frequencies since it is determined by the L/m ratio." (Where L is length and m is mass in kg of a person) The peak absorption for 177Mhz frequency is at one foot. A child's developing torso or an adult's head is about one foot. So, in addition to a child's cells being more vulnerable to cancer risks, their smaller size makes their body more receptive to the absorption of EMR from high MHz frequency signals. At high MHz RF frequencies children may receive twice the Specific Absorption Rate of an adult. This, in addition to the EPA estimate of children being ten times more vulnerable to cancer risks, would put a child at 20 times more risk than an adult to radiation from high frequency DTV.

Based upon the information stated above, the fact that more and more studies are showing possible health damage due to non-ionizing electromagnetic radiation, that very

few studies have looked at long term (> 2 years) exposure affects and children are much more susceptible to electromagnetic radiation; we would therefore respectfully ask that you lower the allowable partial and whole body Specific Absorption Rate (SAR) for general public exposure to less than 0.002W/kg. Since higher frequencies affect newborns and children more than adults the Maximum Permissible Exposure Limit should be lowered to less than 10 microwatts per centimeter squared and remain at that limit out to 300 GHz. We would also request that any test developed to test partial and whole body SAR include the size of newborns, child and adults in the tests.

Jim Martin